



## Radiant Lapidaria

by Arya Akhavan (May 2014)

Angles for R.I. = 1.540

49 + 8 girdles = 57 facets

4-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.590 U/W = 0.590

P/W = 0.627 C/W = 0.202

Vol./W<sup>3</sup> = 0.386

### PAVILION

P1	49.18°	05-19-29-43- 53-67-77-91	Cut to centerpoint.
P2	42.50°	12-36-60-84	Set pavilion depth.
P3	53.87°	12-36-60-84	Meet P1, P2
G1	90.00°	96-24-48-72	Set stone size.
G2	90.00°	12-36-60-84	Level girdle.
P4	60.43°	96-24-48-72	Level girdle.
P5	50.18°	03-21-27-45- 51-69-75-93	Meet P1, P2
P6	57.61°	96-24-48-72	Meet P1, P4, P5

### CROWN

C1	44.50°	96-24-48-72	Set girdle width.
C2	42.65°	12-36-60-84	Level girdle.
C3	41.43°	01-23-25-47- 49-71-73-95	Meet G1, G2, C1, C2
T	0.00°	Table	Meet C1, C3; C2, C3

Someone on the Gemology Online forums asked for a "Square Radiant", and after some Googling, I found a crappy picture of this pavilion. I reverse-engineered it and tweaked it (a LOT) to get it to look good in low-RI materials. Works in materials from quartz to rutile (RI = 1.54 - 2.62) with no changes, but I prefer Morganite. Suggested size = 7-12 mm

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